

ABSTRACT OF THE DISCLOSURE

The method forming a contact pad of a semiconductor device, including forming a plurality of conductive layer patterns displaced on a silicon substrate with adjoining to each other; forming an insulating layer on a top of the conductive layer patterns; depositing a material layer serving as a hard mask on the insulating layer; forming a photoresist pattern between the conductive layer patterns on the hard mask material layer to form a contact hole; defining an area for forming a contact by forming by etching the hard mask material layer with utilizing the photoresist pattern as an etching mask; removing the photoresist pattern; exposing the silicon substrate by etching the insulating layer with utilizing the hard mask as an etching mask to thereby form an open portion; forming a polymer layer on the open portion; exposing the silicon substrate by removing the hard mask and the polymer layer by implementing an etch back process; and forming a contacted pad on the exposed silicon substrate.